What is claimed is:

1. A robotic system comprising:

a robot having at least one motor for manipulating a linkage controlling the displacement of a substrate support coupled thereto;

at least one sensor onboard the robot for providing substrate support displacement information utilized to position the substrate support; and

at least one sensor decoupled from the robot for providing substrate support displacement information for correcting the position of the substrate support.

2. The robotic system of claim 1, wherein the decoupled sensor is positioned to detect presence of the substrate support in a predetermined position, wherein the predetermined position is different than a taught position.

3. The robotic system of claim 1, wherein the decoupled sensor is positioned to detect the rotational orientation of the substrate support.

4. The robotic system of claim 1, wherein the decoupled sensor is positioned to detect the elevation of the substrate support.

5. The robotic system of claim 1, wherein the decoupled sensor is positioned to detect the extension of the substrate support.

6. The robotic system of claim 1, wherein the decoupled sensor is adapted to detect the lateral movement of a central axis of the robot about which the substrate support is rotated.

7. The robotic system of claim 6 further comprising:

a flag fixed in orientation relative to the central axis of the robot and orientated in a position that causes a change in state of the decoupled sensor when the central axis of the robot is moved through a pre-defined position.

8. The robotic sensing system of claim 7, wherein the decoupled sensor is an optical sensor.

9. The robotic system of claim 8, wherein the decoupled sensor comprises:

an admitter and receiver disposed in a spaced-apart relation; and

wherein the flag is coupled to the robot in a position where it may be moved between the admitter and receiver when the robot is in the predefined position.

10. The robotic system of claim 9, wherein the decoupled sensor is selected from the group of sensors consisting of an optical sensor, a capacitor sensor, a Hall effect sensor, an inductive sensor, a mechanical limit switch, an image capturing device and a magnetic sensor.

11. The robotic system of claim 1 further comprising:

a bracket coupled to the robot and having a sensor mounting portion disposed in a spaced-apart relation relative to the central axis of the robot.

12. The robotic system of claim 11, wherein the decoupled sensor is positioned to detect at least one positional attribute of the substrate support selected from the group consisting of elevation, extension or angular position of the substrate support.

13. The robot system of claim 1, wherein the decoupled sensor is fixed in the factory interface in a spaced-apart relation relative to the robot, and wherein the decoupled sensor further comprises a bank of sensors configured to detect at least one positional attribute of the substrate support selected from the group consisting of elevation, extension or angular position of the substrate support, and wherein the position is different than a taught position of the robot.

14. The robotic system of claim 1, wherein the decoupled sensor is positioned to detect presence of the substrate support in a predetermined position, wherein the predetermined position is disposed between a first taught position and a second taught position.

15. The robotic system of claim 1 further comprising:

a second robot having a substrate support coupled thereto by a linkage, wherein the decoupled sensor is position to detect the presence of one of the substrate supports at a predefined position, and that the predefined position is within the range of substrate support motion of each robot.

16. A method for correcting robotic motion, comprising:

sensing an actual position of a robot at a calibration position;

comparing the actual position of the robot with a calculated position corresponding to the calibration position; and

compensating for differences in the actual position and calculated position

17. The method of claim 16, wherein the step of sensing further comprises:

moving the robot laterally to a taught position; and

causing the decoupled sensor to change state before the robot reaches the taught position.

18. The method of claim 16, wherein the step of sensing further comprises:

moving a blade of the robot to a taught position; and

causing the decoupled sensor to change state.

19. A method for correcting robotic motion, comprising:

obtaining a metric indicative of an actual position of a blade of a robot at a first position with a sensor decoupled from the robot;

comparing the actual position of the robot with an expected position derived from a sensor coupled to one or more robot actuators; and

correcting robot motion in response to differences between the actual position and expected position.

20. The method of claim 19, wherein the step of obtaining further comprises:

moving the blade to a taught position; and

causing the decoupled sensor to change state.

21. The method of claim 19 further comprising:

obtaining a metric indicative of an actual position of a blade of a second robot at the first position with the decoupled sensor;

comparing the actual position of the second robot with an expected position derived from a sensor coupled to one or more second robot actuators; and

correcting second robot motion in response to differences between the actual position and expected position.